

YOUR HADO RESEARCH GUIDE

Everything you need to build your AR & Techno Sports presentation, in one place: what AR is, how HADO plays, where it came from, how the court is laid out, and why it belongs at your school.



! Facts here come from the HADO USA / Green Mouse Academy Game Master guide (2025) and the public sources listed at the end. Use them as a starting point, then **put everything in your own words**. Statistics change, so cite the source and date when you use a number.

1

WHAT IS AR, AND HOW DOES IT WORK?

DEFINITION / HADO GUIDE

Augmented Reality (AR) is a technology that adds digital images or effects to what you see in real life, using special devices like headsets or tablets.



HOW AR WORKS IN HADO

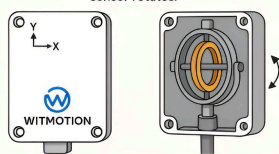
- Each player wears a **headset** (with a viewfinder and crosshairs for aiming) and an **arm motion sensor** on the wrist of their dominant hand.
- The headset and sensor **track your body movement**, and the game turns it into on-screen actions, such as charging and throwing an energy ball.
- Two red and blue **AR Marker Walls** stand at opposite ends of the court, and an **EYE** device is part of the court setup.
- A laptop running **HADO-Server** connects the gear. Each headset is paired with a matching arm sensor (Headset A with Arm Sensor A).



The HADO headset

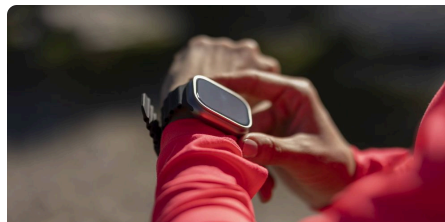
THE SENSORS INSIDE THE GEAR

A gyroscope has a spinning wheel inside. It can tell position and movement when the sensor rotates.



Gyroscope

Senses turning and tilt, like a phone keeping its screen upright when you rotate it.



Accelerometer

Senses speeding up and slowing down, like a fitness tracker counting steps.



Compass

Senses direction (north, south, east, west) so the game knows which way you are facing.

Wearable tech: electronic gear worn on the body, such as headsets and motion sensors.

TRY AR YOURSELF: THE HADO AR WEB APP

Open hado-ar-abstudios.netlify.app on your phone. Nothing to print or install. It has three parts:

The Gear: the HADO headset and wrist sensor.

The Match: a simulated HADO match.

Energy Trainer: throw energy balls at targets.

Use it for your AR demo slide. Get the app running on your phone, then take a photo or screen recording that shows the AR on your screen.

YOUR TURN / REAL-WORLD AR EXAMPLE

The assignment asks for one example that isn't a game, and the HADO app doesn't count because it is a sport demo. Research one yourself. Good places to look: shopping apps that place furniture in your room, navigation apps that show arrows on a live camera view, and medical or repair training. Name the source you used.

2

WHAT ARE TECHNO SPORTS?

DEFINITION

A **techno sport** is a physical, skill-based sport where technology such as AR, sensors, or wearables is part of how the game is played, scored, or experienced. Players compete with their bodies on a real court and the technology adds the game layer.

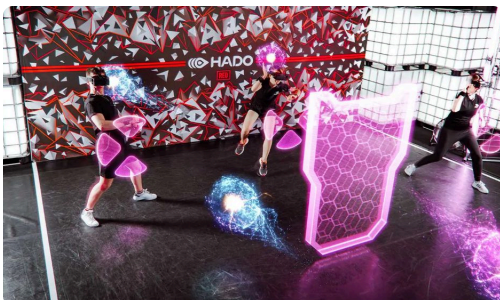
In HADO's own words, it is "an Augmented Reality game crossed with Sports to create a unique Techno Sport." A related description calls it a physical skill-based competition using a head-mounted display and arm sensor.

HOW TECHNO SPORTS DIFFER FROM ESPORTS

	Esports	Techno sports (HADO)
Where you play	On screens, at a computer or console	On a real court in the real world
How you control the game	Keyboard, mouse, or controller	Your whole body (arm motions, dodging, moving)
What the tech does	/s the game, and the world is virtual	Adds digital effects to the real space around you
Physical effort	Mostly seated	Athletic: bending, ducking, dodging, throwing

The difference is where the play happens. In Esports the game world is inside the screen. In techno sports the game world is laid over the real room, and you play by moving.

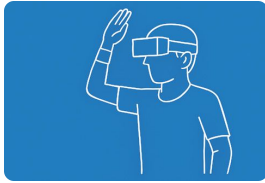
HOW HADO PLAYS



Match: 3 vs 3 (Red vs Blue), 80 seconds per match.

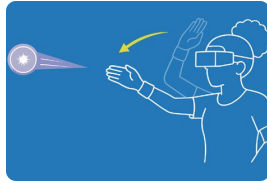
Goal: charge and throw energy balls at opponents to score points. Defend with shields and dodges to protect your **life cells**.

SIGNATURE MOVES



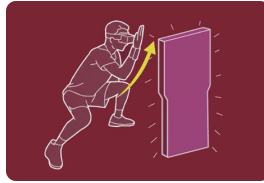
Charge

Hold your arm at a 90° angle and wait a few seconds for energy to build.



Throw

Aim with the headset crosshairs, then move your arm down with control.



Shield

Slowly lift your arm from the floor. Strength is limited, so budget it.



Dodge

Keep your body low to the floor.



Freestyle

A move you create yourself.

TEAM ROLES (ROTATE EVERY MATCH)



CAPTAIN

Captain coaches and referees from the safety zone.



PLAYER

Player competes on the court.



TECHNICIAN

Technician cleans, configures, and swaps gear in the Charge Zone.



TECH CAREERS CONNECTION

An **XR Software Game Tester** plays early versions of AR/VR games to find problems and gives feedback to the engineer, so the game is safe, fair, and fun.

WHAT IS HADO?

Origin and the "world's first" claim

WHERE IT CAME FROM

- HADO comes from Japan. It was created by **Hiroshi Fukuda**, who started the company **meleap Inc.** in **2014** with co-founder Hitoshi Araki.
- Fukuda wanted to throw a "hadouken" energy blast like the heroes in Japanese manga, anime, and video games. He built a sport to make it real. The name *HADO* is the Japanese word for "wave."
- HADO was developed from about 2014 and launched publicly as a sport in **2016**. The HADO WORLD CUP began around then, and is now supported by the International HADO Federation.
- The **2025 HADO World Cup in Shanghai** drew about 30,000 participants from 18 countries (per the Government of Japan's JapanGov site).
- **HADO USA Technology Sports Inc.** secured exclusive US rights from meleap in **November 2021**, which is why HADO is coming to US schools through Green Mouse Academy.

Heads up on dates: they vary by source (2014 for the idea and company, 2016 for the public launch, and one 2019 article about the pro league). Use "developed from 2014 and launched in 2016" and cite where you read it.

HOW BIG IS IT?

10M+

players

40+

countries

2,000+

schools

These are the current numbers on HADO's official site. Earlier sources report smaller numbers (600,000 players in 2017, 2.5 million by 2021), so the count has grown fast. Always give the year.

THE "WORLD'S FIRST TECHNO SPORT" CLAIM

- HADO USA and press releases describe it as **"the world's first AR physical techno sport"** and "the first-ever physical esport in the world using Augmented Reality technology."
- This is a claim made by HADO and its partners, not an independent ranking. Other sports mix technology and physical play, so "world's first" needs care.
- What HADO *can* fairly say is that it was one of the first to combine a head-mounted AR display and a wrist sensor in a team sport with real athletic movement, and that it has built an international league and World Cup around it.

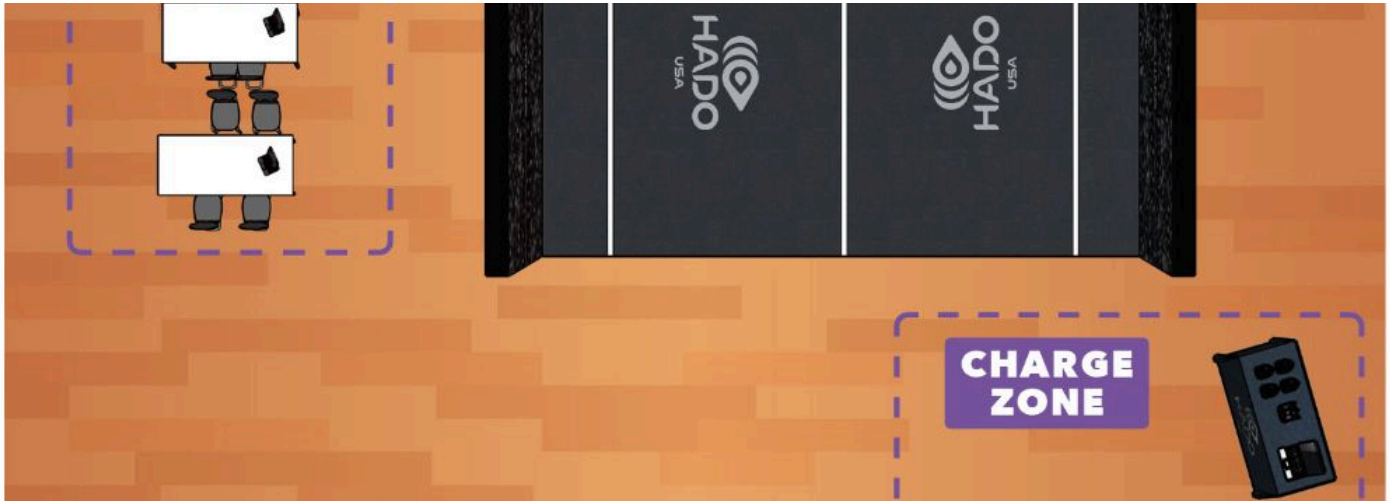
ON YOUR SLIDE, SAY IT LIKE THIS

"HADO describes itself as the world's first AR techno sport." Then back it up with what makes it different: real movement plus AR.

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HADO COURT LAYOUT

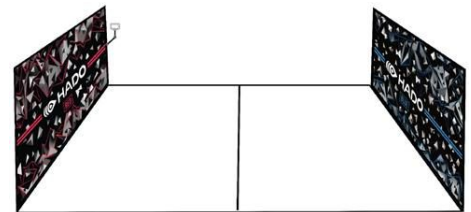
For your diagram



Top view of the three activity areas, from the Game Master setup guide. Use it as a reference, then draw your own.

COURT SIZE

10 m long × 6 m wide (about 33 × 20 ft). It needs at least 33 × 20 ft of floor space and an 8 ft ceiling. The side-view diagram labels a height of 2.2–3 m (about 7.5–10 ft).



AR Marker Walls at each end

LAYOUT, TOP VIEW

- Red and blue **AR Marker Walls** at opposite ends, **perpendicular to the court**.
- Blue masking tape marks the **side lines, center line, and safe (safety) zones**.

THREE ACTIVITY AREAS

HADO COURT

Where players compete.

CHARGE ZONE

The tech area with the laptop, router, power, and spare gear. Technicians clean and swap gear here between matches.

PLAYER HQ

Table or floor space where teams plan and work on challenges.

Spectators: a viewing monitor (laptop, smartboard, tablet, or TV) shows the match, videos, and stats.

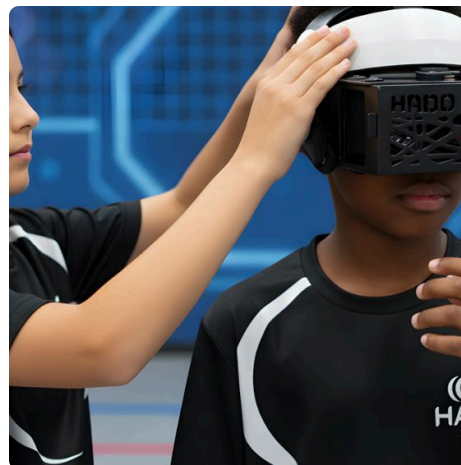
Draw the diagram yourself, roughly to scale. The guide gives no spectator seating plan, so decide where spectators would stand.

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EQUIPMENT AND SETUP

For your "why HADO belongs" argument

- **Space:** any cafeteria, gym, or multipurpose room that fits the court.
- **Kit:** 4 active player device sets (headset + arm sensor), plus 2 spares.
- **Tech kit:** cables, power cords, laptop with HADO-Server, and a router.
- **Extras:** blue masking tape, pencils, timer, and HADO Playbooks.
- **Modes:** Beginner with Shields for early sessions, then Advanced (80-second matches).



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WHY HADO BELONGS AT OUR SCHOOL

STEM skills

How AR, wearable tech, and motion sensing work. Converting court measurements from feet to meters. If/then decision-making. Designing a simple NPC avatar and tuning it with player feedback.

Data and analysis

Tracking personal and team stats from the spectator view, then setting one improvement goal.

Teamwork and communication

Quick callouts, huddles, and rotating roles so everyone plays and helps run the game.

Sportsmanship

Playing fair and respecting others, win or lose.

Careers

Links to XR game tester and other STEM careers.

Structure

A bracket system for fair tournament play.



ALREADY IN SCHOOLS

HADO reports 2,000+ schools, and some Japanese schools and a vocational program use it to teach AR/VR.

7 SOURCES

- HADO Green Mouse Academy Game Master guide (2025)
- [HADO official: About](#)
- [HADO official: Techno eSports training program](#)
- [South Florida Tech Hub: HADO USA and meleap agreement](#)
- [JapanGov: A New AR Sport from Japan](#)
- [The Bridge: meleap funding \(2017\)](#)
- [Forbes / Bernard Marr: HADO \(2019\)](#)
- [HADO AR Sports: Learn more](#)

Images: HADO USA / Green Mouse Academy Game Master presentation slides (2025).